

The German Tribune

A WEEKLY REVIEW OF THE GERMAN PRESS

C 20725 C

Hamburg, 25 December 1977
Sixteenth Year - No. 819 - By air



hammers - chisels - tools

H. R. HOLTSMANN
Unterkirchen 23 · D-5600 Wuppertal 12



gift-articles from
RITTER-ZINN
valuable and
timeless
appeal to
everyone
Ask for more information

RITTER-ZINN KÜHN KG
Annette-von-Droste-Hülshoff-Straße 4
P.O. Box 1347 · D-5758 FRÖNDENBERG
Tel. 02373/72198, W. Germany



We offer a
comprehensive
range of **COMET-**
paint- and artist's
brushes and
KARAKUL-
paint-rollers


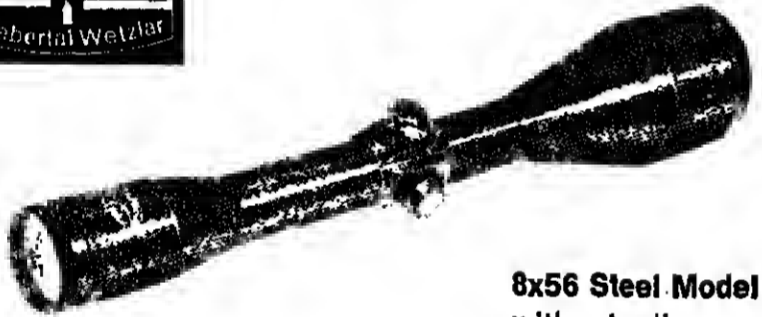
H. L. STERKEL AG COMET-PINSELFABRIK
D-7980 RAVENSBURG, founded 1823
Federal Republic of Germany, P. O. Box 2140
Telex 732 988 comet d, phone-no. 07 51 / 20 58 - 20 59

We manufacture:

Microscopes
Spectroscopes
Illuminated magnifiers
Scale magnifiers
Folding magnifiers



GRÜN-Optik + Feinmechanik KG
P.O. Box 1480 · D-6300 Wetzlar · Giessen
Telephone: 06441/22017 · Telex: 4 83 876

8x56 Steel Model without rail

For night
When setting for observation
Precision Telescopic Sights with greatest twilight factor by difflex coating.
Leading products of best Wetzlar quality work.

Lightweight model - Telescopic Sights
with variable magnification 4 - 12 x 48D,
2 1/4" - 8 x 42 and 1 1/4" - 6 x 38


Lightweight model - Telescopic Sights
6 x 42 and 4 x 36, all with rail

Steel model - Telescopic Sights
8 x 56, 6 x 42 and 4 x 36, all without rail

All models available with double adjustment.
Guarantee 5 years. Schmidt and Bender telescopic sights have been
tried and proved to be bullet and shock proof, water-tight and resilient
to all temperatures all over the world!

Schmidt und Bender OHG
D-6301 BIEBERTAL 4, WETZLAR
Federal Republic of Germany

HPLC is beautiful!
And all those new ultra-efficient columns are great!
But what does it take to run them?



SERVA HIBAR-PACKAGE! What else?

SERVA HPLC ELUENT SUPPLY, sturdy Orbit membrane pump, up to 6000 psi, up to 750 ml/h, automatic, hydraulic pulse dampener, inlet stream and debubbler, pressure gauge with adjustable electric safety shut-off, stand for columns, board for eluents, tools and accessories.

SERVA APPLICATOR VALVE, latest model, 6000 psi, central injection port, sample loops.

SERVA CHROMATOGRAPH, double beam instrument which can be calibrated, 10 µl cuvette, 0.01 O.D. lull scale, 253.7 nm standard, 6 additional wavelengths.

SERVA OMNIRECORDE R, sturdy, reliable light weight, 10 mV fixed gain, 10 chart width, 12 chart speeds, sprocketless drive.

At a remarkably low price!

SERVA-TECHNIK GmbH & Co.
Laboratoriumsgeräte
P. O. Box 10 82 80 · D-6900 Heidelberg 1 · Phone 0 62 21/20 14 · Telex 0481 709
Federal Republic of Germany

Belgrade CSCE conference fails to meet deadline

The Belgrade conference convened on 4 October to review the 1975 Helsinki accords will not succeed in reaching a conclusion this year - just as Western and neutral diplomats anticipated during the preparatory conference last summer.

They accordingly made provision for a further session of the conference from mid-January to mid-February should delegates fail to reach agreement on a draft final document by 22 December.

The final document has been on the Belgrade agenda for weeks but the conference cannot be said to be anywhere near agreement on a draft version.

The thirty-five delegations have submitted no fewer than 100 proposals, some of which are so diametrically opposed to each other that compromise formulas will not always prove possible, given the varying interests of East Bloc and Western participants.

The Czech and GDR delegations, for instance, have called for official under-

takings to ensure that the mass media no longer "intervene in the domestic affairs of other countries."

Western and neutral countries, on the other hand, are backing a Swiss resolution calling for an improvement in working conditions for foreign correspondents and for a freer flow of information.

So it is that the Eastern Bloc, on the pretext of a guarantee of security and cooperation in Europe, is calling for the introduction of press censorship in the West, whereas the non-socialist countries are calling for a gradual relaxation of this selfsame censorship in the East.

It goes without saying that these viewpoints will remain unchanged for some time to come - just as it will take time to draft proposals acceptable to all 35 countries represented at the Belgrade conference.

The Soviet Union is keen to bring the proceedings to a conclusion, but it was agreed at the preparatory talks that the Belgrade conference cannot be declared closed until agreement has been reached on a "substantial" final document and the date and venue of a further review conference.

Moscow is now keen to progress without further delay to sessions at which the draft can be finalised, yet the Soviet delegation, eager though it may be to bring the conference to a conclusion, is unwilling to equip the conference with the wherewithal.

This wherewithal, as the West sees it, consists of the full conference and two working parties to edit the draft, plus

further working parties to deal with the following main topics:

- principles of cooperation, including measures designed to inspire confidence;
- scientific and technological, trade and environmental cooperation;
- improvements in individual contacts and the free flow of information, and in cultural and educational cooperation.

The working parties responsible for these various baskets were, it was decided last summer, to hold their final sessions on 16 December.

In the circumstances it might well have been appropriate to redesignate them as editorial committees and allow them to get on with the job of formulating drafts. But Eastern Bloc delegations fell unable to agree to this proposal.

The fact of the matter is that the Eastern Bloc countries are finding the negative conclusions reached by the three working parties hard to stomach.

They are not interested in a detailed review of the implementation of the Helsinki accords. What they want is a final document framed in more general terms - end as soon as possible.

Siegfried Lüfner
(Kielar Nachrichten, 14 December 1977)



"Just let me catch you mentioning human rights again!"
(Cartoon: Gabriel Ross/Kielar Nachrichten)

Bonn backs anti-terrorist pledge in Belgrade

All acts of terrorist violence are to be expressly condemned in the final document of the Belgrade CSCE review conference.

The Belgrade communiqué is not only to pillory the use of force by terrorists but also to state the signatories' intention of backing an international agreement against hostage-taking that is to be proposed to the United Nations.

This was the gist of the proposal submitted to the full session of the Belgrade conference on 14 December by Per Fischer, head of the Bonn delegation.

Eighteen Western and neutral countries backed the move unflinchingly and a number of other delegations promised support. The Eastern Bloc countries, however - and Yugoslavia too - adopted a wait-and-see attitude.

In his address to the conference Herr Fischer noted that the world is confronted by a new form of terrorist resort to crime so dangerous that individual governments were powerless to deal with it singlehandedly.

"The use of force by terrorists such as the Baader-Meinhof group has reached such proportions in an age of mobility and technical perfection that intergovernmental cooperation is a 'must'."

"Then and then only will it be possible to deal effectively with this new form of international criminal activity."

Over the past decade, Herr Fischer continued, this phenomenon has spanned the world like a malignant tumour, especially in its most repugnant form, that of taking innocent people hostage.

It would be incomprehensible, Bonn's chief delegate exclaimed, if the Belgrade conference were not to deal with this particularly dangerous new manifestation of inhumanity, even though it might not

Berni Conrad
(Die Welt, 15 December 1977)

IN THIS ISSUE

HOME AFFAIRS Page 3
Lutze espionage case causes blow to Nato

THE ECONOMY Page 6
Dollars' nosedive hits German exports

SCIENCE Page 6
Heidelberg astronomers probe secrets of the Univers

Schmidt favours 1980 summit

Nato countries are beginning to come to terms with the idea that a fresh Helsinki review conference ought to be held in 1980 or so 'at political level.'

Whether the conference is a summit meeting, as envisaged by Bonn Chancellor Helmut Schmidt, or a gathering of Foreign Ministers or, indeed, a combination of encounters between specialists and politicians remains to be seen.

Bonn is, however, given to understand that its Nato end Common Market partners are thinking in terms of a successor to the current Belgrade conference.

When Herr Schmidt, during his 1 December talks with Premier Giulio Andreotti of Italy in Verona, called for a fresh summit meeting of European heads of government he did so to the surprise of many observers of the political scene.

Alois Mertes, a Christian Democratic Bundestag deputy who is one of the Bonn Opposition's foreign policy spokesmen, referred to the Chancellor's proposal as a "premature shot from the hip."

True enough, the Chancellor's public statement had not been previously ag-

reed at government level. Yet it is only fair to add that the Foreign Office has long been aware of Herr Schmidt's personal preference for summit meetings unhampered by what he considers to be bureaucratic deadweight.

The Foreign Office has also long known that the Chancellor favours, in the CSCE context, a repetition of the 1975 Helsinki summit.

Chancellor Schmidt agrees with Foreign Minister Hans-Dietrich Genscher that multilateral detente must continue beyond the current Belgrade CSCE review conference, leading in two and a half years or so to a new conference, this time at political level.

The aim is to prevent East-West ties in Europe from becoming mere routine and ensure that they are always given fresh political stimulus, to quote a leading Bonn diplomat.

Besides, well-informed sources com-

ment, the Chancellor only stated in Verona that a fresh summit conference was conceivable and desirable.

At the Nato summit in Brussels a few days later it transpired that a number of Foreign Ministers were all in favour of Herr Schmidt's suggestion, whereas others would prefer a further CSCE conference at Ministerial level.

British Foreign Secretary David Owen, for instance, was one of those who inclined towards a Ministerial conference rather than a summit meeting.

The current conference, Bonn is convinced, will certainly not end in more than a gathering of Foreign Ministry officials. The final communiqué may not even include a specific reference to the level at which the proposed 'political' follow-up conference is to be held.

"That, after all, will depend on the political climate in a year or two's time," one Bonn expert notes.

In all probability the 1980 conference will begin with a gathering of experts whose consultations will be concluded by a summit meeting or a meeting of Foreign Ministers.

Berni Conrad
(Die Welt, 15 December 1977)

Schmidt und Bender

SCIENCE

Heidelberg astronomers probe secrets of the Universe



Heidelberg astronomers have made observations which seem to indicate that stars originate as dense layers of dust, which also serves as the basic material in the birth of planets.

The light emanating from a star that has come into being in the centre of such a dust layer reaches Earth on a direct route in a considerably diminished form. The decisive factor, it is claimed, is the light reflected sideways, which is heavily polarised as a result of a detour.

As far back as two years ago, astronomers of the Heidelberg Max Planck Institute of Astronomy working at the German-Spanish observatory atop Calar Alto in the province of Almeria, Southern Spain, proved the existence of nascent stars still surrounded by clouds of dust.

An infra-red camera developed at the Heidelberg Institute enabled scientists to penetrate the clouds of dust by means of long-wave light.

A few months later, using the same method, astronomers discovered new galaxies closer to our own. Obscured by clouds of dust in the Milky Way, these galaxies appeared as diffuse objects with a heavy red tinge.

Radioastronomers, too, are now increasingly directing their attention to the analysis of stars in the making. As a result a number of areas in which such stars are taking shape have been discovered and are now the focal point of attention at the Max Planck Institute.

It is these stars through which new insights have been gained, but they would not have been possible without the development of new measuring techniques.

Thomas Schmidt, Bodo Schwartz and Klaus Proefel, in cooperation with electronic and precision instruments workshops, have developed new instruments for the exact measurement of brightness — in other words, photometry — and for the determination of the frequency direction of the light captured (polarisation measurements) with which they are carrying out extensive readings in the vicinity of nascent stars.

When these instruments were put to use at the 1.2-metre telescope on Calar Alto, the three above-mentioned scientists arrived at startling results in their observations.

In the dust layer W-3 there are objects with an unusually high proportion of polarised light, amounting to as much as sixteen per cent. In the M 17 dust layer polarisation proportions reached an amazing 26 per cent, and there was a surprising uniformity in the direction of polarisation planes.

According to Hans Elsässer, director of the Heidelberg Institute, attempts to explain the high proportion of polarised light by means of dust clouds that are obscuring the light rays seem fairly improbable.

He considers it more likely that the star, in other words the source of the light, is embedded in a dense, disc-like cloud of dust. This cloud of dust lies in the direction of the viewer, thus permitting only small quantities of light to

reach him. The observed light consists primarily of those rays which the star exudes to both sides of the dust disc.

In such places there is a dent in the dust disc shaped like a thin cloud which reflects the light at a ninety-degree angle, and this accounts for the high degree of polarisation. It seems evident that this cloud consists of matter that has been hurled sideways.

This interpretation is pretty much in keeping with theoretical ideas concerning the birth of a star within a planetary system.

A mass of dust begins to rotate, forming a flat disc in the centre of which there occurs a concentration which gives rise to the creation of a star. Planets form on the outskirts of the rotating dust disc.

Subsequently, the light rays of the young stars hurl the material not utilised in forming the star and the planets into space, and eventually the star is seen in its full brightness.

The fact that a number of cosmic objects which are close enough to make their bipolar structure discernible seems to indicate that the dust disc theory of the Heidelberg astronomers is rather plausible.

Thus, for instance, there are two bright dust areas in the so-called Egg Fog with a seventy-per-cent proportion

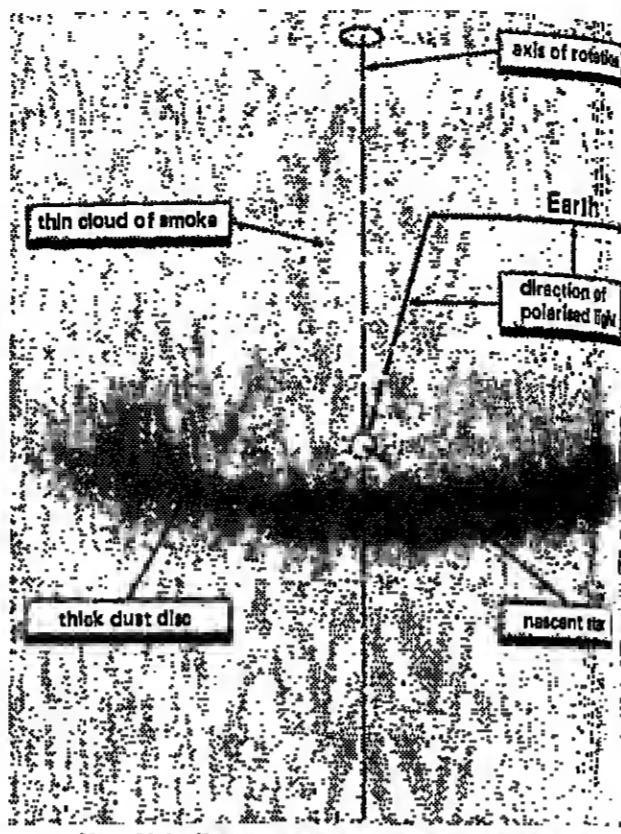
of polarised rays. In between there is a dark area which evidently obscures the central star through heavy layers of dust. The fact that in W 3 and M 17 the rotation axes of the bipolar dust discs are very uniform in direction — in W 3 they are virtually all perpendicular to the galactic plane — seems to indicate a uniform stimulus mechanism, in other words, the rotation of the dust discs and thus the creation of stars and planetary systems must be triggered by a common mechanism such as a shock wave running through the Milky Way system.

Neighbouring the W 3 area there are the somewhat older areas W 4 and W 5. It is assumed that the shock wave reached W 5 and W 4 first, subsequently reaching W 3 and ushering in the process that gave rise to the birth of the star there. The situation is somewhat more complicated with regard to M 17.

The phenomenon of the bipolarity could thus be typical for certain places in the coming about of stars. Moreover, young stars frequently appear bedded in flat dust discs.

The formation of planetary systems therefore probably a rather frequent occurrence and there is every likelihood that the universe contains more planetary systems than hitherto assumed.

(Süddeutsche Zeitung, 9 December 1974)



How Heidelberg astronomers reckon stars are born

(Photo: W3)

The phenomenon of the bipolarity could thus be typical for certain places in the coming about of stars. Moreover, young stars frequently appear bedded in flat dust discs.

The formation of planetary systems therefore probably a rather frequent occurrence and there is every likelihood that the universe contains more planetary systems than hitherto assumed.

(Süddeutsche Zeitung, 9 December 1974)

Versatile particle accelerators

Once in a while particle accelerators make headlines. Generally, these headlines are related to the discovery of a new element — and it is always the same large-scale accelerators that are mentioned.

In Western Europe these are usually those of the European Nuclear Research Centre (CERN) in Geneva or the DESY electron synchrotron in Hamburg.

It would appear as if only these major installations matter. But in actual fact, says nuclear physicist Dr Josef Ney, professor at the Technical University in Berlin, many small accelerators installed in numerous universities and research institutes play a more important role in everyday life.

Professor Ney, for instance, has a compact cyclotron, a roughly circular accelerator for hydrogen and helium nuclei, at his disposal.

His accelerator is propelled by a fifty-kw FM transmitter which is considered a strong unit even in radio terms. This achieves an energy of twenty million electron volts which equals about one-fifth of the speed of light.

Such a speed can circle the equator three times within a span of a mere two seconds.

The relatively small so-called compact cyclotrons are by no means a rarity. Baden-Württemberg alone has about ten of them, according to Professor Ney's estimates. They are used not only to train students but also assist in many fields of technology.

For the physicist-to-be work on a cyclotron is an activity involving many sectors of science.

In order to engage in nuclear experiments by means of an accelerator, students must familiarise themselves with vacuum technology, electronics, data processing, high-frequency technology as

well as the various regulations governing protection from radiation.

Thus for instance, by bombarding lithium, beryllium and a number of other metals with hydrogen nuclei it is possible to trigger nuclear reactions within the cyclotron which lead to highly penetrating neutron rays.

Such reactions have the property of inflicting heavier damage to certain cancer cells than to healthy tissue, and are thus suitable as a means of cancer therapy. This type of therapy is already being practised in Heidelberg, in Rijswijk, Holland and in the United States.

Purpose-oriented nuclear reactions by means of cyclotrons enable man to produce short-lived radioactive substances which are steadily gaining in importance in the field of diagnosis and medical research.

The objective in both instances is to identify radio isotopes through their radiation and to follow their course in the human body. This enables physicians to check the function of individual organs and thus arrive at an early diagnosis of a considerable number of ailments.

It is therefore important to have cyclotrons located in the vicinity of clinics. Experts in nuclear medicine have a vested interest in the use of short-lived radio isotopes which have no lasting detrimental effect on the patient.

Because they are short-lived they preclude the possibility of transporting them over long distances.

Ideally, says Professor Ney, such iso-

topes should be used within a few hours after having been produced.

In other cases it suffices to mark certain substances by injecting them with molecules of ray-emitting isotopes of an existing chemical element.

Thus for instance dentists would like to know whether fluoride actually is the properties attributed to it by tooth-paste advertisements.

Experts differ on the question whether fluoride prevents caries, whether it should be added to drinking water or whether it is absorbed by tooth enamel. This question is now to be clarified in Berlin by means of "marked" fluoride. Professor Ney hopes to be commissioned to provide the necessary radio isotopes.

So far, dentists have used arsenic to destroy nerves. Alas, it is still unknown how much of this arsenic enters the patient's body. This question, too, can be clarified by means of marked arsenic.

Even pharmacology can expect to gain new insights through radio isotopes which would enable experts to follow the route of a marked drug through the body.

But cyclotrons can also play an assisting role in criminology by enabling experts to activate certain substances. Subsequent analysis can prove the presence of substances amounting to more than one-billionth part of a gram.

Tiny paint splinters after a traffic accident involving a hit-and-run case, for instance, can thus provide clues as to the manufacturer of the paint.

Meanwhile, the use of cyclotrons also proved its worth in establishing the origin of metals used in antique coins.

Tiny but typical additives which

Continued on page 14



The ideal companion for trips to Venezuela

The Obersee Verlag has begun publishing a series of illustrated travel guides, starting with Caracas, capital of Venezuela, and will shortly be bringing out guides to the cities of Lima, Bogota and Cairo. The aim of these pictorial guides is to present a picture of the world's most important cities, by word and illustration.

Cereca illustrated guide, published by Ibero-Amerika Verlag, Hamburg, 32 pages, 24 pages of color photos, bound in a four-color cover. In English, Spanish and German. Price 6.50 DM.



Übersee Verlag GmbH

Telephone: (040) 226 52 28
Schöne Aussicht 23 · 2000 Hamburg 78

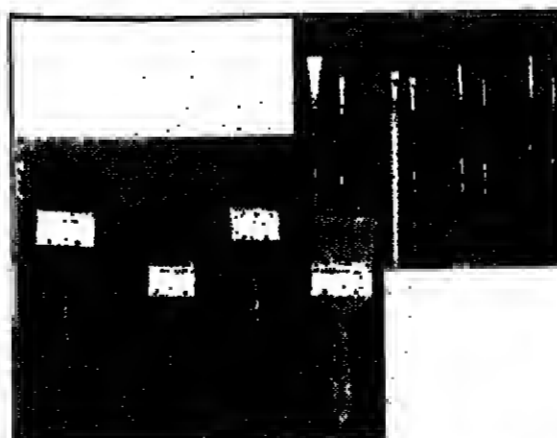
HESCO

DELICIOUS SOUPS



HESCO Soups are well known to expert cooks for their excellent quality. They are packed climateproof with no chemical additives and will keep for several years. HESCO quality Soups are highly concentrated. This keeps the coat of packaging and transport down, as well as any import duty payable.

HESCO — Hessler & Co.
Düsseldorfer Str. 42/44
D-401 Hilden, West Germany



We offer a comprehensive range of COMET-paint and artist's brushes and KARAKUL-paint-rollers

H. L. STERKEL AG COMET-PINSELFABRIK
D-7980 RAVENSBURG, founded 1923
Federal Republic of Germany, P. O. Box 2140
Telef 732 988 comet d, phone-no. 07 51 / 20 58 - 20 59

KEY-READY INDUSTRIAL PLANTS
CEMENT PRODUCTS · STEEL PRODUCTS
FOODSTUFFS

WEST AFRICA — MIDDLE EAST — FAR EAST
LATIN AMERICA

STELLING & WAGNER

MANUFACTURERS · EXPORTERS · CONSULTANTS

HAMBURG
FEDERAL REPUBLIC OF GERMANY

If you can't use soap use seba med[®]



to cleanse and care for hard-worked skin.
Recommended for ECZEMA · ACNE · SEBORRHOEA
and personal hygiene

Seba med, a genuine synthetic, has been used for years at university dermatological clinics. We will gladly send you on demand official reports, samples and the full range of special discount rates for the medical profession.
Write to:
Sebatat Chemicals,
P.O.B. 80, 5404 Bad Seitz/Rhein,
Federal Republic of Germany.
We are leading manufacturers and export worldwide.

Seba med soap cleanses pores — deep but gently — fights bacteria — deodorises biologically.

Seba med liquid for your hair, in the bath and under the shower.

Seba med cream lotion protects and cares for your body and hands — regulates moisture, renews and smooths the skin.

■ ARCHAEOLOGY

Tübingen archaeologists unearth Ice Age site

Little or nothing was known about the Ice Age inhabitants of West Germany until Joachim Hehn and a team of Tübingen University archaeologists started digging at Lommersum, near Euskirchen.

Traces of human habitation dating back to the end of the Ice Age had been found, but not of the millennia of the Ice Age proper — apart, that is, from cave dwellers in an isolated area of the Swabian Alb.

At the end of the Ice Age, when the Baltic was still full of alighting glaciers, packs of hunters are known to have lived in the Eifel mountains, near Cologne, and in the vicinity of Hemburg.

They set up their tents as they travelled around, staging major religious festivals from time to time.

All told, however, the distribution of finds creates the impression that the wide open countryside between the glaciers to the north and south was uninhabited, which was surely not the case.

In point of fact the chilly steppes between the glaciers must have been full of large animals and a happy hunting ground for the people who occasionally dwelt in South German caves.

Yet few traces of Ice Age habitation have been found, and for a good reason. Such traces as there may have been were destroyed by the ravages of the climate.

Ice Age Germany was a circumglacial zone in which permafrost began just below ground level, whereas the soil at

surface level was in a continual state of flux.

Rainwater was unable to percolate down to the water table. For thousands of years it just washed around the surface, churning up hills and silted up dells and destroying virtually without trace such testimony as might have remained to the life and times of Ice Age Man.

This makes Dr Hehn's dig at Lommersum in the Eifel hills all the more exciting. The Eifel hills, south of Cologne, slope down to the Rhine in the east and the Moselle in the south and the dig is located on a terraced bank of the Ice Age Rhine.

Over a period of years Dr Hehn and his Tübingen archaeologists have pieced together traces of Ice Age hunters who lived here 32,000 years ago, to judge by carbon dating techniques.

It was the last cold spell of the Ice Age following a warmer period. The weather was cold and dry. The vegetation, to judge by traces of charcoal and pollen, cannot have been any too inviting.

The Ice Age Rhineland was an almost treeless grass-covered tundra sporting occasional dwarf birch and willow trees.

A farmer and amateur archaeologist first discovered the Lommersum site. Coming across unusual white-edged flint artifacts he realised that he had found something special and reported his find to the authorities.

It soon transpired that these flint utensils were tens of thousands of years old and had belonged to Ice Age Aurignac Man.

Subsequent excavations revealed that the village, or whatever it might have been, had only been preserved in part, the kitchen and workshops having escaped destruction by being midway between high ground which was eroded and low ground that was silted up.

Any traces of tents or huts had long since disappeared. Living quarters appear to have been further uphill on land that was later eroded.

So no one knows how large this community of Ice Age hunters was, but they certainly left behind heaps of bones and antlers of their quarry — reindeer, for the most part.

Ice Age Man is known to have camped here three times over a period of several decades, slaughtering between twenty and fifty reindeer at a time. He also appears to have hunted wild horses and bears too must have been in evidence; a solitary bear's tooth was found among the bones. The flint utensils were used mainly to strip and cut the carcasses.

The flint came from a site about twenty miles away, which was no distance for the nomadic hunters of Lommersum.

The flint came from a site about twenty miles away, which was no distance for the nomadic hunters of Lommersum.

Oddly enough, the one skull is the only trace of Neanderthal Man to have been found in the Rhineland. He seems, however, to have been a frequent cave-dweller in prehistoric France.

(Frankfurter Allgemeine Zeitung für Deutschland, 7 December 1977)



Fireplaces and kitchen middens at Lommersum in the Eifel hills testify to human habitation by the banks of the Ice Age Rhine. (Photo: Universität Tübingen)

Roman Xanten rebuilt in open air

Frankfurter Neue Presse

Were the Roman city of Xanten to be rebuilt on its sunken foundations it would look for all the world like Dodge City or any number of Western film sets.

Archaeologists are convinced that the Ancient Romans built their city on the Rhine with two-storey buildings and covered wooden pavements or arcades of the kind we associate with America's Wild West.

At the end of the first season during which Xanten open-air museum was open to visitors Dr Christoph Rüger, curator of the *Rheinisches Landesmuseum* Bonn, told journalists that this "Welterk" would be resurrected solely in the form of two facades facing one another.

The further reconstruction of the city known to the Romans as Colonia Ulpia Traiana will, he stated, be aimed mainly at reconstructing as many aspects as possible of everyday life in Ancient Rome in an open-air atmosphere.

The open-air museum will eventually include the first complete harbour dating back to the ancient world to be reconstructed north of the Alps.

The Roman city is now some distance from the Rhine but 1,800 years ago it was a major port. A twenty-foot length of wooden quayside has already been excavated and only recently a three-foot length of rope came to light.

It will, however, be years before the harbour has been reconstructed complete with ships and cranes as used in the days of Emperor Trajan.

Enormous quantities of gravel, first to be dredged and bulldozed. What is more, a complete trunk road, the *Bundesstrasse 57*, must be reconstructed.

Local people are enthusiastic; their imagination has been fired. Since the museum was opened to the public in June 182,000 members of the public have passed through the turnstiles.

Next year a quarter of a million visitors are expected to come from the country and neighbouring Holland.

(Frankfurter Neue Presse, 12 December 1977)



Ancient Roman brickwork forming part of the foundations of the harbour gets at Xanten on the Rhine in the second century AD. (Photo: Landschaftsverband Rheinland/Rheinisches Landesmuseum Bonn)

BRASS GIFTWARE

Antique and modern style brass articles
A wide range is available in each category
Ask for details and make your choice!

Old and new metalcraft
FRIEDRICH PETERS
P. O. Box 1242
D-3007 Gehrden 1
Federal Republic of Germany

German Spierling Wine and Spirite

The exclusive Söhnlein products are known worldwide top-quality and reasonable prices

Ask for literature and detailed offer from:

SÖHNLEIN RHEINGOLD KG

Söhnleinstraße 8 · P.O.Box 190339 · D-6200 Wiesbaden 13 (Gießhain) · Federal Rep. of Germany
Phone: (06121) 2 28 01 · Telex: 41 88795 · Cable: Rheingold Wiesbaden

With improved active ingredients
Effective protection after sweets! Without sugar

Please ask for details and samples:

dentasan
GmbH & Co. KG

D-2901 Wielelede-Melendorf
Federal Republic of Germany
Telex: 25 889

CHEWING GUM

Protects from caries, parodontosis and bleeding of the gums

The **hewatron**

range includes the following high-grade electrical goods at prices you cannot afford to ignore:

- table-top fans
- hair dryers
- electronic desk clocks
- air purification units

Heberlein GmbH.
Flächenzeile 39, P.O.B. 2328, D-7750 Konstanz,
Federal Republic of Germany

a division of Heberlein Holding AG, Wattwil, Switzerland

Hafico Tincture Presses

HAFICO tincture presses are manufactured in four sizes, two, five, 25 and fifty litres, and for manual or motorized operation. They are for use in manufacturing and pressing drug extracts, pharmaceuticals, essences etc.

The presses are used in laboratories and in the production stage by essence manufacturers, in the pharmaceutical and drugs industry, at distilleries, universities and test laboratories, in the foodstuffs, sugar and cellulose industries and in many others.

Pressure is sustained hydraulically up to 450 bars, enabling manufacturers to make the most of their raw materials.

H. FISCHER & CO. KG
SPEZIALMASCHINENFABRIK
P.O. Box 1106 - D-4040 Neuss 21
North - West Germany

If you are looking for **Fast Selling Garnet Jewellery**

It pays to get to know our collection. We offer a fascinating assortment of garnet jewellery in gold — bracelets, rings, ear-rings, necklaces, brooches, etc.

Write for catalogue and price list!

WILHELM BRAUN OHG
Krummhaeldenweg 10
D-7531 Kattern-Dietingen
Federal Republic of Germany

Modern living room lamps

Decorative illuminated mirrors

A specialised and unique manufacturing process enables us to present designs and colours which cannot be produced using other materials.

Please write for brochures.

Cristallux-Werk
D-7244 Waldachtal 5
West Germany

Urgently needed:

Leading importers and department stores for exclusive distribution of textiles for the home.

Our GAMMACOLOR® trimmings and printed decoration materials

are among the leading and best designed collections of textiles for the home in Europe.

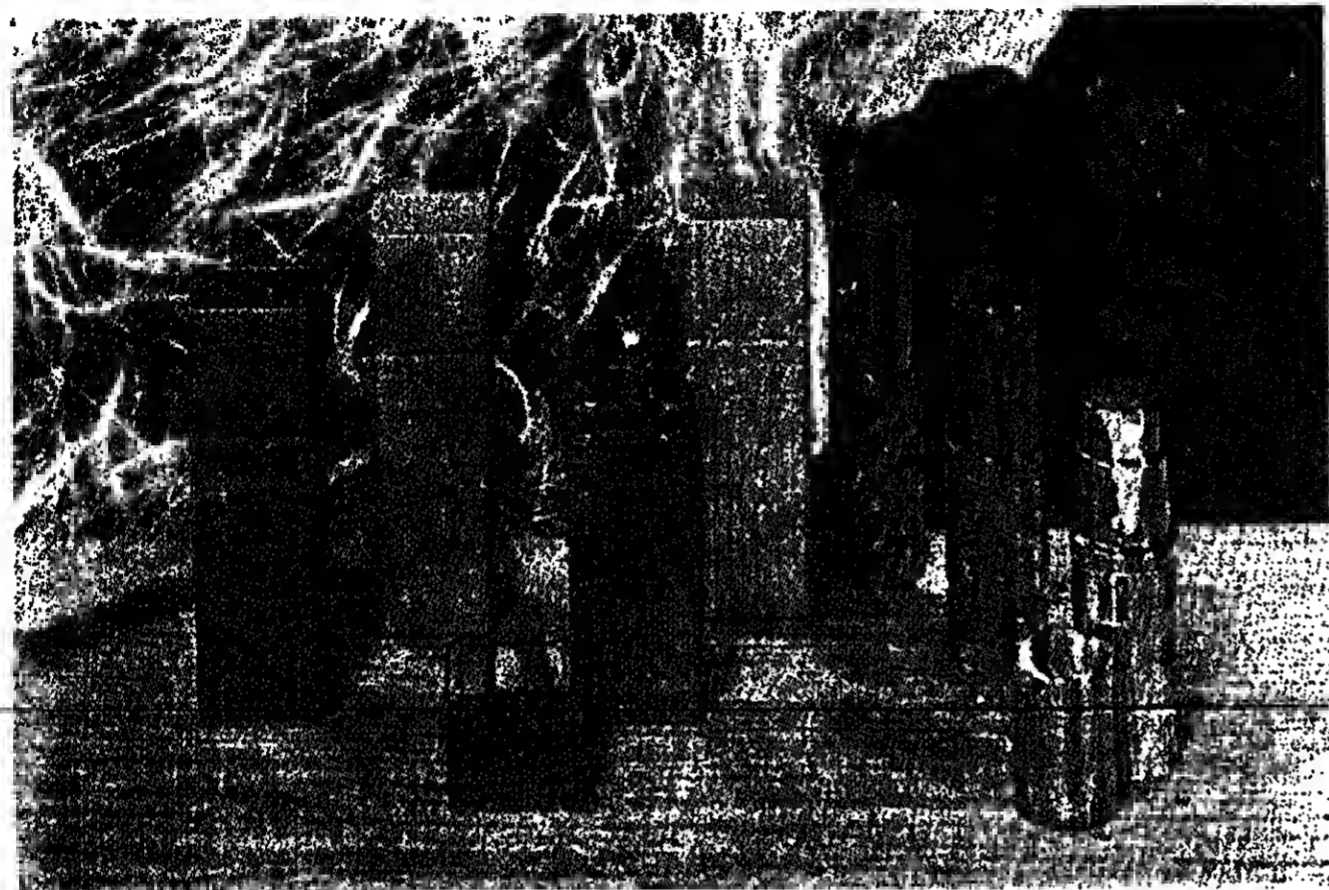
With no long delivery dates we can supply, ex-warehouse, 75 styles of beddings, borders, drape holders, drapa tassels, drape cords, fringe etc. with an exclusive range of colours and made of high grade materials.

Selection from high quality sample books which can be supplied promptly.

BARANDE & CO
Hofweg 54
D-5600 Wuppertal 1/West Germany
Tel.: 02 02 / 45 02 05 - Telex: 08 591 261

Handwritten Arabic text in the left margin.

"PAVAP"-Pocket Atomizers with a Touch of Elegance



Shown here are 7 representative models of our metal pocket atomizer novelties, refillable at any time.

We deliver many other pocket and dressing table atomizers in metal, porcelain and opal glass.

We supply top quality at favourable prices. Two-year guarantee on all spray pumps.

Please, ask for literature and offers.

Send your inquiries to:

PFEIFFER

Zerstäubervertriebsgesellschaft m. b. H. & Co KG

P.O.Box 1460 · D-776 Radolfzell · W-Germany

مكتبة من الأصيل